

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) An image photographing apparatus for photographing a still image, comprising:
 - a scanning imaging device for generating image signals; ~~and~~
 - control means for using the image signals generated by said imaging device to adjust the still image during at least one control period before photographing, said control means defining a single detection area which is both vertically and horizontally limited within said imaging device and reading only the image signals within the single detection area out of said imaging device, the read image signals being used to adjust the still image before photographing and a control period of said control means being set in correspondence within a read-out period associated with of said single detection area; and
 - ~~wherein only the single detection area is used for adjustment with the detection area being smaller than an effective pixel plane associated with the image photographing apparatus;~~
 - ~~whereby only segments of horizontal lines within the detection area are read~~
 - a pulse counter circuit for receiving instructions from said control means pertaining to a quantity of rows that are read using a high speed clock and setting a value in response to the quantity of rows,

wherein when the quantity of rows equals a predetermined value, output signals are generated to control a switching unit which switches from the high speed clock to a normal vertical clock.

2. (Previously Presented) The image photographing apparatus according to Claim 1, wherein the control means also controls the imaging device when the still image is being photographed.

3. (Previously Presented) The image photographing apparatus according to Claim 1, wherein the control means determines a start position of the single detection area and the amount of image signals to be read out within the single detection area, and, accordingly, only the image signals within the single detection area are read out of the imaging device.

4. (Previously Presented) The image photographing apparatus according to Claim 3, wherein the control means allows a high-speed scan in a region before the start position of the single detection area, allows a predetermined-speed scan in the single detection area, and allows only the determined amount of image signals to be read out.

5. (Previously Presented) The image photographing apparatus according to Claim 1, wherein, based on the read image signals, at least one of automatic focus control, automatic photographic sensitivity control, and automatic white balance control is performed.

6. (Currently Amended) An image photographing method for photographing a still image by a scanning imaging device for generating image signals, comprising the steps of:

when the image signals generated by the imaging device are used to adjust the still image before photographing:

defining a single detection area which is both vertically and horizontally limited within the imaging device; and

reading only the image signals within the single detection area out of the imaging device;

adjusting during at least one control period, by using the read image signals within the single detection area, the still image before photographing; and

establishing a control period as a function of a read-out period associated with the single detection area; and

~~wherein only the single detection area is used for adjustment with the detection area being smaller than an effective pixel plane associated with the image photographing apparatus; and~~

~~whereby only segments of horizontal lines within the detection area are read~~

receiving instructions pertaining to a quantity of rows that are read using a high speed clock and setting a value in response to the quantity of rows.

wherein when the quantity of rows equals a predetermined value, output signals are generated to switch from the high speed clock to a normal vertical clock.

7. (Previously Presented) The image photographing method according to Claim 6, wherein a control means also controls the imaging device when the still image is being photographed.

8. (Previously Presented) The image photographing method according to Claim 6, wherein the reading step includes the step of determining a start position of the single detection area and the amount of image signals to be read out within the single detection area, so that only the image signals within the single detection area are read out of the imaging device.

9. (Previously Presented) The image photographing method according to Claim 8, further comprising the step of:

performing a high-speed scan in a region before the start position of the single detection area, performing a predetermined-speed scan in the single detection area, and reading out only the determined amount of image signals.

10. (Previously Presented) The image photographing method according to Claim 6, wherein, based on the read image signals, at least one of automatic focus control, automatic photographic sensitivity control, and automatic white balance control are performed.

11. (Currently Amended) An image photographing apparatus for photographing a still image, comprising:

a scanning imaging device for generating image signals; ~~and~~

control means for using the image signals generated by the imaging device to adjust the still image during at least one control period before photographing, the control means defining a single detection area within the imaging device and reading only the image signals within the single detection area out of the imaging device, the read image signals being used to adjust the still image before photographing;

wherein the control means controls at least two scan speeds with a first scan speed being used outside the single detection area and a second scan speed being used within the single detection area, the first scan speed being greater than the second scan speed~~[[,]]~~~~a predetermined value associated with a pulse counter being used by the control means for determining a switching point between speeds; and~~

a pulse counter circuit for receiving instructions from the control means pertaining to a quantity of rows that are read at the first scan speed and setting a value in response to the quantity of rows,

wherein when the quantity of rows equals a predetermined value, output signals are generated to control a switching unit which switches from the first scan speed to the second scan speed.

~~wherein only the single detection area is used for adjustment with the detection area being smaller than an effective pixel plane associated with the image photographing apparatus; and~~

~~wherein a control period is set in correspondence with a read-out period associated with the single detection area; whereby only segments of horizontal lines within the single detection area are read.~~

12. (Previously Presented) The image photographing apparatus according to Claim 11, wherein said control means controls said imaging device when the still image is being photographed.

13. (Previously Presented) The image photographing apparatus according to Claim 11, wherein the control means determines a start position of the single detection area and the amount of image signals to be read out within the single detection area, and only the image signals within the single detection area are read out of the imaging device.

14. (Previously Presented) The image photographing apparatus according to Claim 13, wherein the control means allows a high-speed scan in a region before the start position of the single detection area, allows a predetermined-speed scan in the single detection area, and allows only the determined amount of image signals to be read out.

15. (Previously Presented) The image photographing apparatus according to Claim 11, wherein, based on the read image signals, at least one of automatic focus control, automatic photographic sensitivity control, and automatic white balance control is performed.

16. (Currently Amended) An image photographing method for photographing a still image by a scanning imaging device for generating image signals, comprising the steps of:
when the image signals generated by the imaging device are used to adjust the still image before photographing:

defining, by control means, a single detection area within the imaging device;

reading, by the control means, only the image signals within the single detection area out of the imaging device;

adjusting during at least one control period, by using the read image signals within the single detection area, the still image before photographing; and

controlling at least two scan speeds with a first scan speed being used outside the single detection area and a second scan speed being used within the single detection area, the first scan speed being greater than the second scan speed~~[[,]] a predetermined value associated with a pulse counter being used by the control means for determining a switching point between speeds; and~~

receiving instructions pertaining to a quantity of rows that are read at said first scan speed and setting a value in response to the quantity of rows,

wherein when the quantity of rows equals a predetermined value, output signals are generated to switch from the first scan speed to the second scan speed.

~~wherein only the single detection area is used for adjustment with the detection area being smaller than an effective pixel plane associated with the image photographing apparatus; and~~

~~wherein a control period is set in correspondence with a read-out period associated with the single detection area; whereby only segments of horizontal lines within the single detection area are read.~~

17. (Previously Presented) The image photographing method according to Claim 16, wherein the control means also controls the imaging device when the still image is being photographed.

18. (Previously Presented) The image photographing method according to Claim 16, wherein the reading step includes a step of allowing the control means to determine a start position of the single detection area and the amount of image signals to be read out within the single detection area, so that only the image signals within the single detection area are read out of the imaging device accordingly.

19. (Previously Presented) The image photographing method according to Claim 18, further comprising the step of:

allowing the control means to perform a high-speed scan in a region before the start position of the single detection area, to perform a predetermined-speed scan in the single detection area, and to read out only the determined amount of image signals.

20. (Previously Presented) The image photographing method according to Claim 16, wherein, based on the read image signals, at least one of automatic focus control, automatic photographic sensitivity control, and automatic white balance control are performed.